

JULIET® LL  
Lateral Lumbar Cage



FEB - 3 2014

## 510(k) SUMMARY

Submitted by	<b>SPINEART</b> International Center Cointrin 20 route de pré-bois CP1813 1215 GENEVA 15 SWITZERLAND
Contacts	Franck PENNESI Director of Industry & Quality Phone : +41 22 799 40 25 Fax : +41 22 799 40 26 Mail : <a href="mailto:fpennesi@spineart.com">fpennesi@spineart.com</a> Regulatory contact : Dr Isabelle DRUBAIX (Idée Consulting) <a href="mailto:idrubajx@nordnet.fr">idrubajx@nordnet.fr</a>
Date Prepared	November 12 <sup>th</sup> 2013
Common Name	Intervertebral body fusion device
Trade Name	JULIET® LL Lateral Lumbar Cage
Classification Name	Intervertebral Fusion Device With Bone Graft, Lumbar
Class	II
Product Code	MAX
CFR section	888.3080
Device panel	ORTHOPEDIC
Legally marketed predicate devices	Juliet®PO (K081888 and K101720) manufactured by Spineart Coroent XL (K071795 and K081611) manufactured by Nuvasive Capstone (K121760) manufactured by Medtronic Lanx Fusion System – Lateral (K103666) manufactured by Lanx AVS PL PEEK AVS Plus -UniLIF (K090816) manufactured by Stryker Spine
Indications for use	JULIET®LL Lumbar Interbody Device is indicated for intervertebral body fusion procedures in skeletally mature patients with degenerative disc disease (DDD) at one or two contiguous levels from L2-S1. DDD is defined as discogenic back pain with degeneration of the disc confirmed by patient history and radiographic studies. These DDD patients may also have up to Grade 1 spondylolisthesis or retrolisthesis at the involved level(s). This device is to be used with autogenous bone graft. JULIET®LL Lumbar Interbody Device is to be used with supplemental fixation. Patients should have at least six (6) months of non-operative treatment prior to treatment with an intervertebral cage

Description of the device	The JULIET®LL Lateral Lumbar cages are rectangle-shaped intervertebral body fusion devices with a central cavity that can be filled with bone graft (autograft) to facilitate fusion. The JULIET®LL intervertebral body fusion spacer comes in various sizes and footprints in order to fulfill surgeons' needs and accommodate different patient anatomies. The JULIET®LL system is made of PEEK Optima conforming to ASTM F2026 with spikes made of Titanium 6Al-4V ELI conforming to ASTM F136 and ISO 5832-3 and Tantalum markers conforming ASTM F560.
Technological Characteristics	The JULIET® LL Lateral Lumbar cages are 21 mm wide and available in five lengths (from 40 to 60 mm) and five heights (from 8 to 16 mm). The JULIET® LL range of lumbar implants are delivered sterile (gamma sterilization) and supplied with dedicated surgical instruments (reusable – provided non sterile).
Discussion of Testing	The following non-clinical tests were conducted on JULIET®LL: Static axial compression, Static shear compression according to ASTM F2077 and subsidence testing according to ASTM F2267. Results demonstrate that JULIET®LL performs as safely and effectively as its predicate device JULIET®PO.
Conclusion	The JULIET® LL is substantially equivalent to its predicate devices in terms of intended use, material, design, mechanical properties and function. The subject and predicate devices have nearly identical technological characteristics and the minor differences do not raise any new issues of safety and effectiveness. Non clinical performance testing demonstrate that JULIET®LL is as safe, as effective, and performs as safely and effectively as its predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center - WO66-G609  
Silver Spring, MD 20993-0002

February 3, 2014

Spineart  
Mr. Franck Pennesi  
Director of Industry and Quality  
International Center Cointrin  
20 route de pré-bois CP 1813  
1215 Geneva 15  
SWITZERLAND

Re: K133557

Trade/Device Name: Juliet® LL Lateral Lumbar Cage  
Regulation Number: 21 CFR 888.3080  
Regulation Name: Intervertebral body fusion device  
Regulatory Class: Class II  
Product Code: MAX  
Dated: November 15, 2013  
Received: November 19, 2013

Dear Mr. Pennesi:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical

device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

Vincent J. Devlin -S  
for  
Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**Indications for Use**

510(k) Number (*if known*)

K133557

Device Name

JULIET® LL Lateral Lumbar Cage

**Indications for Use (Describe)**

JULIET® LL Lumbar Interbody Device is indicated for intervertebral body fusion procedures in skeletally mature patients with degenerative disc disease (DDD) at one or two contiguous levels from L2-S1. DDD is defined as discogenic back pain with degeneration of the disc confirmed by patient history and radiographic studies. These DDD patients may also have up to Grade I spondylolisthesis or retrolisthesis at the involved level(s). This device is to be used with autogenous bone graft. JULIET® LL Lumbar Interbody Device is to be used with supplemental fixation. Patients should have at least six (6) months of non-operative treatment prior to treatment with an intervertebral cage

Type of Use (*Select one or both, as applicable*)

Prescription Use (Part 21 CFR 801 Subpart D)       Over-The-Counter Use (21 CFR 801 Subpart C)

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

**FOR FDA USE ONLY**

Concurrence of Center for Devices and Radiological Health (CDRH) (*Signature*)

Anton E. Dmitriev, PhD

**Division of Orthopedic Devices**

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